

Two New *Clubiona* Spiders (Araneae: Clubionidae) from Japan¹⁾

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の2新種

Abstract Two new species of the spider genus *Clubiona* LATREILLE, 1804, are described from Kanagawa Prefecture, Honshu, Japan, under the names *C. ikedai* and *C. kumadaorum*. The former new species belongs to the species-group of *Clubiona obesa* (subgroup of *C. akagiensis*) and resembles *C. chikunii* HAYASHI, 1986, while the latter seems to be a member of the species-group of *C. pallidula* (subgroup of *C. propinqua*) and closely related to *C. maya* HAYASHI et YOSHIDA, 1991.

Up to the present, about 50 species of spiders of the genus *Clubiona* LATREILLE, 1804, classified into 14 species-groups were recorded from Japan (presented by the author at the annual meeting of the Arachnological Society of Japan, 1992). However, many unrecorded species including several new ones were left for further, taxonomical studies. In the spider collections provided for the author's study by some Japanese arachnologists, many interesting spiders of the family Clubionidae have been prepared for publications. Of these, two new species of the genus *Clubiona* collected from Kanagawa Prefecture will be reported in the present paper.

All the type specimens of the new species described in this paper are deposited in the collection of the National Science Museum (Natural History), Tokyo.

The following abbreviations are used: ALE, anterior lateral eye, AME, anterior median eye, PLE, posterior lateral eye, PME, posterior median eye.

Before going further, the author wishes to express his heartfelt thanks to Ms. Shigeyo INABA, Hadano, Mr. Hiroyoshi IKEDA, Yokohama, Mr. Tatsuo ISHIIHARA, Hakone, and Mr. Ken-ichi KUMADA, Yokohama, for their offering invaluable specimens.

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Genus *Clubiona* LATREILLE, 1804*Clubiona ikedai* sp. nov.

(Figs. 1-4)

Type series. Holotype: ♂, Ōwakudani, Hakone-machi, Ashigarashimo-gun, Kanagawa Prefecture, Japan, 27-X-1986, H. IKEDA leg.; allotype: ♀, same locality and date as for the holotype, S. INABA leg.; paratypes: 1♀1♂, same locality, 22-IX-1986, S. INABA leg., 1♀, same locality, 2-VI-1989, T. ISHIHARA leg. (NSMT-Ar 2951-2955).

Other specimens examined. 1♀1♂, Amagi-tôge, between Tagata-gun and Kamo-gun, Shizuoka Prefecture, Japan, 8-V-1985, K. KUMADA leg. (NSMT-Ar 2956).

Description (based on the holotype and allotype). *Measurement.* Body length ♀ 7.22 mm, ♂ 5.85 mm; prosoma length ♀ 3.37 mm, ♂ 2.48 mm, width ♀ 2.30 mm, ♂ 1.74 mm; opisthosoma length ♀ 3.70 mm, ♂ 3.22 mm, width ♀ 2.44 mm, ♂ 1.63 mm; lengths of legs I-IV (in mm) [total (tarsus + metatarsus + tibia + patella + femur)]: ♀ I 7.48 (0.81 + 1.33 + 1.93 + 1.19 + 2.22), II 7.78 (0.81 + 1.41 + 2.00 + 1.19 + 2.37), III 6.89 (0.63 + 1.81 + 1.41 + 1.04 + 2.00), IV 10.01 (0.78 + 2.89 + 2.26 + 1.19 + 2.89), ♂ I 7.15 (0.74 + 1.41 + 1.93 + 1.00 + 2.07), II 7.19 (0.74 + 1.37 + 1.89 + 1.04 + 2.15), III 6.45 (0.63 + 1.67 + 1.41 + 0.89 + 1.85), IV 8.92 (0.70 + 2.67 + 2.15 + 0.96 + 2.44).

Prosoma. Eyes: ALE/AME ♀ 1.40, ♂ 1.10, PLE/PME ♀♂ 1.00, AME-AME/AME-ALE ♀♂ 1.00, PME-PME/PME-PLE ♀ 1.25, ♂ 1.29. Chelicera normal in both the sexes, with five small and two large teeth on promargin of fang furrow and five teeth on retromargin. ♀♂ Tibia I with 2-2-0 ventral spines, metatarsus I with 1-0 (♀) or 2-0-0 (♂) ventral spines.

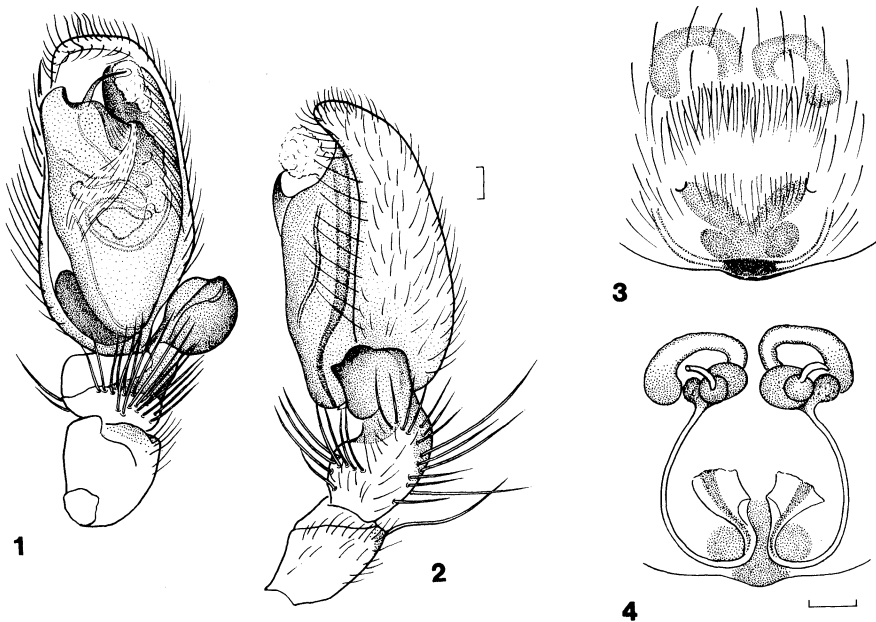
Male palp (Figs. 1-2). Tibia with strong spines; retrolateral apophysis large, sclerotized and expanded. Tarsus with large bulb; tegular apophysis developed, embolus spiniform and short, conductor developed and spongily expanded.

Female genitalia (Figs. 3-4). Intromittent orifices small, situated in the middle part of epigynum. Intromittent canal narrow, long and curved; atrium digitiform and curved; spermatheca small and globular, with a large gland.

Coloration and markings. ♀ Prosoma yellowish brown with reddish chelicera, maxillae and labium; sternum yellowish brown, legs much paler. Opisthosoma light yellowish brown without any marking. ♂ Prosoma light yellowish brown; chelicerae, maxillae and labium yellowish brown; sternum, legs and palps yellow. Opisthosoma light orange, venter light yellowish brown.

Variation. Body length ♀ 6.59-7.22 mm, ♂ 5.78-5.85 mm. The body of the ♂ paratype greyish.

Remarks. This new species belongs to the species-group represented by *Clubiona obesa* HENTZ, 1847 [subgroup of *C. akagiensis* HAYASHI, 1985, designated by MIKHAILOV (1990)] and bears a close resemblance to *C. chikunii* HAYASHI, 1986, but can be distinguished from the latter by the shape of male palp and by the structure of female genitalia. The embolus of *C. ikedai* is shorter



Figs. 1-4. *Clubiona ikedai* ONO, sp. nov.—1, Male palp, ventral view; 2, same, retrolateral view; 3, female genitalia (epigynum), ventral view; 4, female genitalia cleared, dorsal view. (Scales: 0.1 mm.)

than that of *C. chikunii*, and the intromittent orifices of epigynum are situated in the middle part of epigynum in *C. ikedai*, while those of *C. chikunii* are in the posterior part. Both the orifices of *C. ikedai* are widely separated from each other.

The specific name of this new species is dedicated to Mr. Hiroyoshi IKEDA, Kanagawa Prefectural Youth Center, Yokohama.

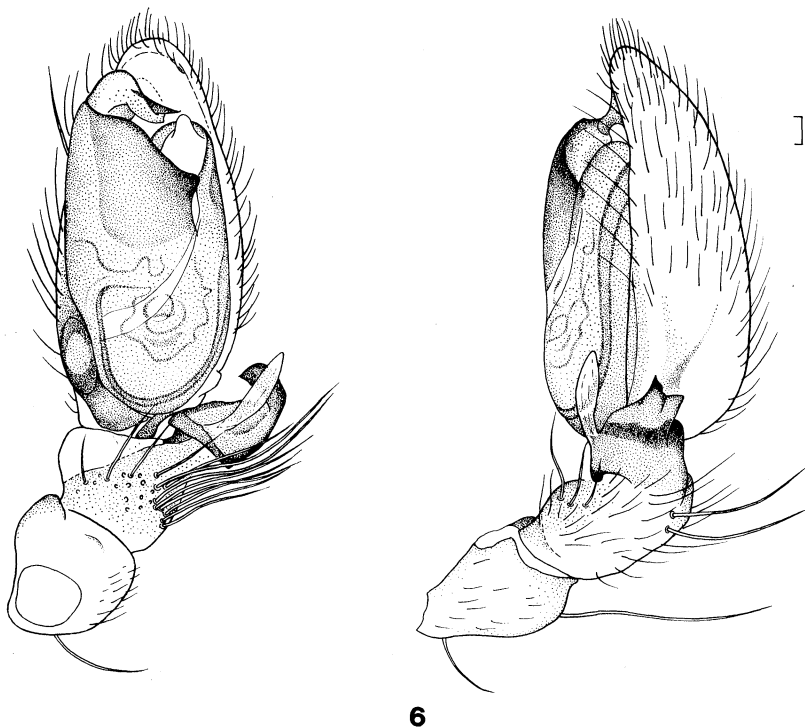
***Clubiona kumadaorum* sp. nov.**

(Figs. 5-6)

Type specimen. Holotype: ♂, Nakagawa, Yamakita-machi, Ashigarashimogun, Kanagawa Prefecture, Japan, 19-X-1978, Ken-ichi KUMADA leg. (NSMT-Ar 2957).

Description (based on the ♂ holotype; ♀ unknown). *Measurement.* Body length 5.48 mm; prosoma length 2.56 mm, width 1.85 mm; opisthosoma length 3.04 mm, width 1.59 mm; lengths of legs (in mm) [total (tarsus + metatarsus + tibia + patella + femur)]: I 7.92 (0.89 + 1.58 + 2.15 + 1.00 + 2.30), II 8.19 (0.93 + 1.56 + 2.22 + 1.11 + 2.37), III 6.85 (0.63 + 1.78 + 1.59 + 0.89 + 1.96), IV 9.47 (0.81 + 2.81 + 2.26 + 1.00 + 2.59).

Prosoma. Eyes: ALE/AME 1.05, PLE/PME 1.18, AME-AME/AME-



Figs. 5-6. *Clubiona kumadaorum* ONO, sp. nov.—5, Male palp, ventral view; 6, same, retrolateral view. (Scale: 0.1 mm.)

ALE 1.42, PME-PME/PME-PLE 1.62. Chelicera normal, with four small and two large teeth on promargin of fang furrow and one small and two large teeth on retromargin. Tibia I with 2-2 ventral spines; metatarsus I with 2-0-0 ventral spines; tibia, metatarsus and tarsus of leg I with scopula.

Male palp (Figs. 5-6). Tibia with many long spines; retrolateral apophysis with two processes, dorsal process short and strongly sclerotized, ventral one a transparent membranous leaflet, long and digitiform. Tegular apophysis very wide and sclerotized; conductor short and not developed; embolus short, thick and distally flexuous.

Coloration and markings. Prosoma dark yellow, chelicerae, maxillae and labium darker, sternum, legs and palps yellow; opisthosoma light beige without any marking.

Remarks. *Clubiona kumadaorum* belongs to the species-group represented by *C. pallidula* (CLERCK, 1758) [subgroup of *C. propinqua* L. KOCH, 1879 designated by MIKHAILOV (1991)]. It seems to be closely related to *C. maya* HAYASHI et YOSHIDA, 1991, described from Mt. Maya-san, Yamagata Prefecture, Japan, but can be distinguished from the latter by the structure of male palp. The dorsal process of the retrolateral tibial apophysis of *C. maya* is very short,

and the tegular apophysis of *C. kumadaorum* is much wider than that of *C. maya*.

The specific name of this new species is dedicated to Mr. and Mrs. Ken-ichi and Rie KUMADA, Yokohama.

摘 要

神奈川県産の *Clubiona* (フクログモ属) の2新種, *C. ikedai* (ハコネフクログモ—新称—) および *C. kumadaorum* (クマダフクログモ—新称—) を記載した. 前者は *C. obesa* 種群 (細分では *C. akagiensis* 種群) に属し, *C. chikunii* HAYASHI, 1986 (チクニフクログモ) に類似する. 一方, 後者は *C. pallidula* 種群 (細分では *C. propinqua* 種群) のもので, *C. maya* HAYASHI et YOSHIDA, 1991 (マヤフクログモ) と近縁の種と思われる.

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